

Pulmonary Embolism (PE)

- **Why all the interest in PE?**

The third most common cardiovascular disease after heart attack and stroke (Society for Vascular Surgery) and the second leading cause of sudden death, behind coronary artery disease.

Mortality for PE ranges from 2% to greater than 20%. With this large range of mortality risk, reliable risk stratification represents the key to PE management.

- **PE Risk Stratification**

Despite the existence of several risk schemes, the number of PE risk schemes continues to proliferate and includes a number of variables (imaging, biomarkers, hemodynamic profile, right ventricular effects and preexisting comorbidities of the patient), making accurate prediction of PE prognosis challenging.

It is therefore not surprising that appropriate identification and treatment of PE remains somewhat controversial.

- **PE Treatment**

New catheter directed therapies have emerged for the treatment of PE alongside existing therapy – anticoagulation, systemic thrombolysis, and open surgical pulmonary embolectomy. Data comparing different treatment modalities is sparse.

The PERT team (Pulmonary Embolism Response Team) approach balances the benefits of intervention against potential risks in a multidisciplinary approach in the absence of clear clinical trial data and guidelines.

- **PROMPT ESCALATION with “PERT Team” Activation**

- A. Positive Diagnostic Tests

Zipit can integrate with EMRs and/or diagnostic systems and communicate positive test results immediately to clinicians for timely intervention.

- B. Timely intervention of the PERT Team

Zipit can simultaneously notify a multidisciplinary group to meet the patient at the time of occurrence. The role of the team is rapid and accurate risk stratification. Members of this cross-specialty PE team include: Echo tech, Cardiologist, Pulmonologist, Pharmacist, Cardiac surgeon, not to mention interventional radiology teams and vascular ultrasound. Multidisciplinary collaboration facilitates patient management with consensus of different specialists, who together can risk stratify the patient and weigh the risks and benefits of different therapeutic approaches to treatment.



References

1. Pulmonary Embolism Response Teams, Current Treatment Options in Cardiovascular Medicine, June 2015, 17:27
2. A Multidisciplinary Pulmonary Embolism Response Team: Initial 30-Month Experience With A Novel Approach To Delivery Of Care To Patients With Submassive And Massive Pulmonary Embolism. Chest 2016;150(2):384-393.